



## REMARKS/ARGUMENTS

This is in response to the Office Action mailed July 31, 2006. Claims 1-12 and 14-16 are pending in the application. Claim 1 has been amended to recite the detection of meticillin-resistant *Staphylococci* strains and the antibiotics previously recited in claims 4 and 6. No new matter is added with the amendment. Claims 2, 4, 5, 6 and 9 have been cancelled. With the entry of this Amendment, claims 1, 3, 7-8, 10-12 and 14-16 are pending for consideration.

### **I. Claim Rejection under 35 USC § 102**

Claims 1, 8, 10, and 14 stand rejected under 35 U.S.C. 102(b) as being anticipated by Grant (U.S. Patent No. 5,650,290, issued July 22, 1997).

In response, Applicants respectfully submit, and the Examiner has acknowledged (Office Action at page 3, paragraph 4), that Grant does not concern the detection or growth of *Staphylococcus* strains. Rather, Grant discloses a "method and medium for use in detecting *E. coli* and total coliforms" by using *a bactericidal system selective against non-coliform bacteria and a sensible indicator selectively metabolized by Escherichia coli* (column 3, line 67 to column 4, line 2). If the sensible indicator is clearly a chromogenic compound (see column 6, line 27), the disclosed bactericidal system is constituted by methylene blue + erythromycin (see column 7, lines 51-54 and claim 21). Cefsulodin™ is cited as the only possible bactericidal system (lines 41-42 of column 5).

In fact, in Grant, the antibiotic such as Cefsulodin™ are not used for differentiating the sensitive from the resistant strains within one species (*Staphylococcus aureus* as according to the present invention), but are conventionally used to eliminate other groups of species such as *Pseudomonias* and *Aeromonas* for the purpose of making the medium more selective for *E. coli* and coliforms. Grant nowhere discusses or suggests a medium for the growth and differentiation of *Staphylococcus* or *Staphylococcus aureus*.

Because Grant fails to disclose each element of the claimed invention, it does not defeat the novelty of the present invention and the rejection under 35 USC § 102 (b) should be withdrawn.

## II. Rejections under 35 U.S.C. § 103

Under U.S. law, a combination of references may render a claimed invention obvious if the examiner shows all of the recited claim elements in the combination of references that make up the rejection. When combining references to make out a *prima facie* case of obviousness, the examiner is obliged to show by citation to specific evidence in the cited references that (i) there was a suggestion/motivation to make the combination and (ii) there was a reasonable expectation that the combination would succeed. Both the suggestion/motivation and reasonable expectation must be found within the prior art, and not be gleaned from applicants' disclosure. *In re Vaeck*, 20 USPQ2d 1438, 1442 (Fed. Cir. 1991); *In re Dow Chemical Co.*, 5 USPQ2d 1529, 1531 (Fed. Cir. 1988); *W.L. Gore v. Garlock, Inc.*, 220 USPQ 303, 312-13 (Fed. Cir. 1983) (holding that is improper in combining references to hold against the inventor what is taught in the inventor's application); *see also* MPEP §§ 2142-43 (August 2001). Thus, the examiner must provide evidentiary support based upon the contents of the prior art to support all facets of the rejection, rather than just setting forth conclusory statements, subjective beliefs or unknown authority. *See In re Lee*, 277 F.3d 1338, 1343-44 (Fed. Cir. 2002).

When an examiner alleges a *prima facie* case of obviousness, such an allegation can be overcome by showing that (i) there are elements not contained in the references or within the general skill in the art, (ii) the combination is improper (for example, there is a teaching away or no reasonable expectation of success) and/or (iii) objective indicia of patentability exist (for example, unexpected results). *See U.S. v. Adams*, 383 U.S. 39, 51-52 (1966); *Gillette Co. v. S.C. Johnson & Son, Inc.*, 16 USPQ2d 1923, 1927 (Fed. Cir. 1990); *Bausch & Lomb, Inc. v. Barnes-Hind/Hydrocurve*, 230 USPQ 416, 419-20 (Fed. Cir. 1986).

In the present case, claims 1, 2 and 15 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Grant (U.S. Patent No. 5,650,290) in view of Merlino *et al.* (*J. Clin. Microbiol.*, 2000). Applicants respectfully traverse this rejection.

The Examiner believes that Merlino *et al.* teach that MRSA strains can be detected on a medium containing a chromogenic agent and an antibiotic, and that according to Grant, this antibiotic is a third generation cephalosporin. Applicants respectfully submit that the Examiner selectively reads Merlino *et al.* At page 2380, Merlino teaches that CHROMagar *Staph. aureus* with methicillin or oxacillin allows the detection of multi-drug-resistant MRSA strains but non-multi-drug-resistant community-acquired MRSA strains grow inconsistently on said medium. This observation is developed at the end of left column to the right column of page 2380. This shows that the results obtained according to Merlino *et al.* are not satisfactory for the detection of MRSA strains, which contrasts sharply with the results shown in Example 2 of the present application. In Example 2, applicants show a comparison between the medium disclosed in Merlino *et al.* and the one of the present invention. Only the medium of the present invention allows the detection of all MRSA strains.

Consequently, Applicants submit that when read in its entirety, Merlino *et al.* would not have motivated one skilled in the art to combine the art as the Examiner has done. Such a combination does not give rise to a "reasonable expectation of success". In fact, it is arguable that Grant directs one away from the invention. Grant directs one skilled in the art to the use of methylene blue + erythromycin. Grant does not suggest any possible benefit resulting from the use of a cephalosporin. Furthermore, Merlino *et al.* discloses media with important limitations due to the fact that all the MRSA strains are not detected. Finally, applicants point out that Grant does not disclose the cephalosporins in amended claim 1. In view of these deficiencies, applicants respectfully request the Examiner to reconsider and withdraw the obviousness rejection of the combination of Grant with Merlino *et al.*

The Examiner also rejects claims 1, 3, 7, 8, 12 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Grant (U.S. Patent No. 5,650,290) in view of Rambach

(PCT Pub. No. WO 00/53799, published Sep. 14, 2000). Applicants respectfully traverse this rejection.

Rambach relates to a chromogenic medium for detecting *Staphylococcus aureus*. This document teaches a medium comprising deferoxamine (column 1, lines 53-59, column 2, line 27 and Table and claim 1).

Applicants assert that one of skill in the art would not have been motivated to combine Grant with Rambach. According to the teaching of Rambach, it is necessary to have deferoxamine in the medium and according to Grant, the bactericidal system is constituted by methylene blue + erythromycin. Consequently, based on these teachings, one skilled in the art is not directed to the use of a cephalosporin, as recited in claim 1 of the present invention. In view of these deficiencies, applicants respectfully request the Examiner to reconsider and withdraw this rejection.

Claims 1 and 4 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Grant in view of Vouillamoz *et al.* (*Antimicrob. Agents Chemother.*, 2001). Applicants point out that the rejection over claim 4 is moot in view of its cancellation. Applicants respectfully traverse this rejection as it applies to claim 1.

Vouillamoz *et al.* disclose a treatment for endocarditis by improving the efficacy of Q-D against MRSA strains (see the Abstract and first sentence of the DISCUSSION). This document concerns a domain quite different from the one of the present invention.

The Examiner cites the passage (right column of page 1793) concerning the mortality of rats following a cephalosporin monotherapy, a Q-D monotherapy or a Q-D-cephalosporin treatment. This teaching does not relate to the claimed media, consequently, one of skill in the art would not be motivated to combine it with Grant for any reason. Applicants therefore respectfully assert that this rejection is improper as a matter of law and should be withdrawn.

Claims 1, 5, 6, 9 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Grant in view of Aratika *et al.* (*Antimicrob. Agents Chemother.*, 2001). Applicants respectfully traverses this rejection.

Aratika *et al.* teaches a clinical treatment for MRSA strain Mu3. It does not relate to a media for purposes of detection. Specifically, Aratika *et al.* disclose a combination effect of vancomycin +  $\beta$ -lactams against *Staphylococcus aureus* strain. At page 1292, right column, they state: "*Tested  $\beta$ -lactams were oxacillin, ampicillin, ceftiofur, cefmetazole...*". Aratika *et al.* explains that Mu3 is a MRSA strain that is difficult to treat because it has heterogeneous resistance to vancomycin. In fact, these strains are VISA (Vancomycin Intermediate Resistant *S. aureus*). The paper discusses potential lines of experimentation to overcome this problem. Although this reference invites experimentation, it does not pertain to the same problem addressed by applicants' invention and one of skill in the art would not have been motivated to combine its teachings with Grant to arrive at the present invention. Applicants therefore respectfully request the Examiner to withdraw the rejection over Grant in combination of Aratika *et al.*

Consequently, Applicants respectfully submit that none of the document combinations presented by the Examiner is likely to destroy the inventive step of the present invention.

**CONCLUSION**

In light of the above amendments and comments, Applicant respectfully requests that all rejections and objections be withdrawn and that a timely Notice of Allowance should be issued in this application. Should the Examiner have any questions, the Examiner is invited to contact the undersigned at the telephone number listed below.

Respectfully submitted,

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